



MEMORANDUM

TO: Delaware Water Supply Coordinating Council
 FROM: Gerald Kauffman (Water Resources Agency)
 DATE: April 20, 2018
 SUBJECT: Water Supply Self-Sufficiency Projections for Northern New Castle County

Enclosed are projected maximum monthly water demands for 2018 and 2021 for public water utilities in northern New Castle County. According to the Delaware Self Sufficient Water Supply Act, the Water Supply Coordinating Council shall review these water demands and vote to determine whether to forward these projections to the Public Service Commission. Please review the enclosed water demand projections and vote whether to approve to forward these projections to the PSC.

The Delaware Self Sufficient Water Supply Act amendments of 2011 (Public Utilities, Chapter 14) state that on or before March 1 of each reporting year (2018), the Water Supply Coordinating Council shall determine and publish for the following projected year (2021), the projected demand for each water utility providing services in the drought sensitive area (New Castle County north of C & D Canal).

Before July 1, 2018, each water utility in northern New Castle County shall submit to the WSCC: (1) consumer water conservation plan for the following 3-year period, (2) certification of adequate water supply for the projected year (2021), and (3) water conservation rate structure. After July 1, 2018, the WSCC shall review the water utility's certification of adequate supply and submit a recommendation to the Public Service Commission.

Table 1 summarizes maximum monthly water demands for northern New Castle County estimated for the reporting year (2018) and projected year (2021). Peak maximum monthly demands recorded by the water purveyors for the 5-year period (2013-2017) are used to estimate maximum demands for 2018. Water demands are projected to 2021 based on a 0.5% per year increase in population forecast for New Castle County by the Delaware Population Consortium, Annual Population Projections (October 2017).

Table 1. Maximum monthly water demand projections for northern New Castle County, 2018 and 2021

Water Purveyor	2018 Demand (mgd)	2021 Demand (mgd)
Wilmington	18.4	18.7
Artesian Water Co.	19.8	20.1
SUEZ DE	20.4	20.7
Newark	3.8	3.9
New Castle MSC	0.6	0.6
Total	63.0	63.9

Note: Water demands for 2018 are peak maximum monthly demand recorded by purveyors for 5-year period 2013-2017. Water demands for 2021 projected based on 0.5% per year increase in population forecast for New Castle County by Delaware Population Consortium, October 2017.

Table 2. Maximum monthly water demands in northern New Castle County

Purveyor	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Wilmington	20.7	21.3	18.8	17.3	17.2	17.2	18.4	17.0	18.4	18.5	18.6	18.7
Artesian Water	19.5	19.8	20.0	18.0	19.8	19.2	19.3	18.6	19.8	19.9	20.0	20.1
SUEZ DE	18.9	20.4	20.5	17.8	18.6	20.4	18.9	17.9	20.4	20.5	20.6	20.7
Newark	3.7	3.9	4.1	3.5	3.8	3.5	3.4	3.3	3.8	3.8	3.8	3.9
New Castle MSC	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6
Total (mgd)	63.4	66.0	63.9	57.1	59.9	60.8	60.6	57.3	63.0	63.3	63.6	63.9

Base 2018 demand from peak maximum monthly demand during 5-year period 2013-2017. Projected 2021 and 2030 demands based on 0.5% annual population growth for New Castle County (Delaware Population Consortium Oct. 2017).

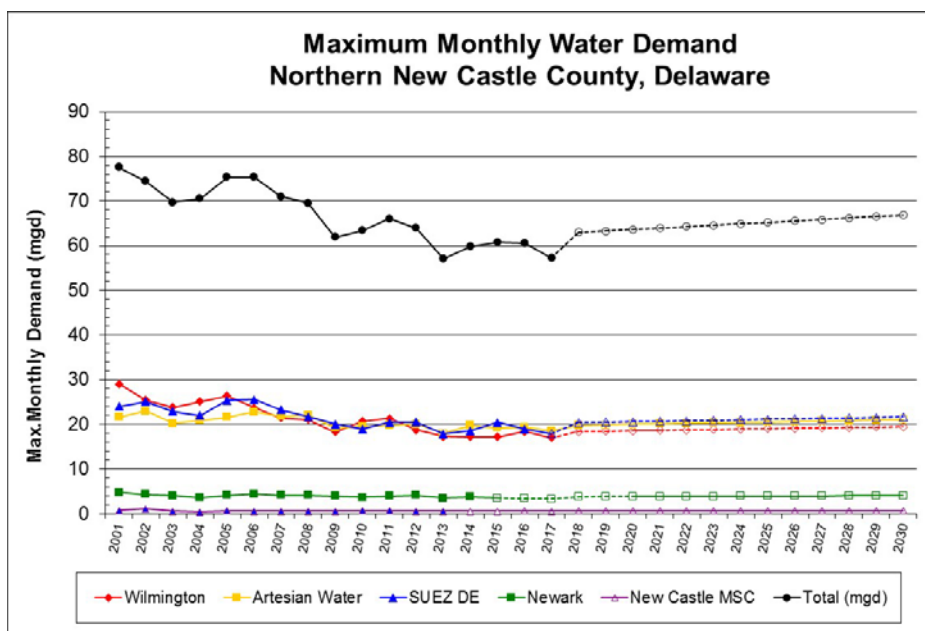


Figure 1. Maximum monthly water demands in northern New Castle County Projected demands through 2030 based on 0.5% annual population growth for New Castle County (Del. Population Consortium, Oct 2017).

Table 3. Maximum monthly water demands in northern New Castle County (2010-2017)

Purveyor	2010	2011	2012	2013	2014	2015	2016	2017
June (mgd)								
City of Wilmington	20.7	19.0	17.9	16.7	17	16.2	16.7	17.0
Artesian Water Co.	19.4	18.9	18.7	18.0	19.8	18.0	18.4	18.6
United Water Del.	16.4	19.1	17.6	17.3	17.6	18.8	17.9	17.4
City of Newark	3.7	3.6	3.6	3.3	3.4	3.3	3.1	3.1
New Castle MSC	0.6	0.6	0.5	0.4	0.5	0.5	0.4	0.5
Total	60.8	61.2	58.3	55.7	58.3	56.8	56.5	56.6
July (mgd)								
City of Wilmington	19.9	21.3	18.8	17.3	17.2	16.6	17.4	16.9
Artesian Water Co.	19.5	19.8	20.0	18.0	19.1	19.2	18.7	18.6
United Water Del.	17.7	20.4	20.5	17.8	18.6	20.4	18.9	17.8
City of Newark	3.7	3.9	4.1	3.5	3.2	3.3	3.1	3.3
New Castle MSC	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4
Total	61.3	65.9	63.9	57.1	58.6	60.0	58.7	57.0
August (mgd)								
City of Wilmington	19.8	20.0	17.4	16.6	16.6	17.2	18.4	16.3
Artesian Water Co.	19.1	17.8	18.2	17.5	18.9	18.6	19.3	18.3
United Water Del.	18.9	19.6	19.1	16.1	17.3	20.3	18.7	17.9
City of Newark	3.7	3.5	3.9	3.3	3.8	3.5	3.4	3.2
New Castle MSC	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Total	62.0	61.4	59.1	54.0	57.1	60.1	60.3	56.1